

## Claims

We claim:

1. A computer-implemented method for storing execution progress of a test  
5 executive sequence, the method comprising:

executing the test executive sequence on a computer system;

performing one or more snapshots of the execution of the test executive sequence,  
wherein each snapshot is performed at a particular point during execution of the test  
executive sequence;

10 wherein, for each snapshot, performing the snapshot comprises storing  
information usable to re-start execution of the test executive sequence from the point at  
which the snapshot was performed.

2. The method of claim 1, further comprising:

15 stopping execution of the test executive sequence after a particular snapshot is  
performed;

re-starting execution of the test executive sequence from the point at which the  
particular snapshot was performed;

20 wherein said re-starting execution of the test executive sequence comprises using  
the stored information of the snapshot to restore an execution environment of the  
computer system so that the test executive sequence can execute correctly from the point  
at which the particular snapshot was performed.

3. The method of claim 2,

25 wherein said restoring the execution environment of the computer system  
comprises using the stored information of the snapshot to re-create a stack frame of the  
computer system.

4. The method of claim 3,

wherein said re-creating the stack frame comprises placing data on the stack frame so that the stack frame is in a state as if execution of the test executive sequence had run to the point at which the particular snapshot was performed.

5           5.       The method of claim 2,  
              wherein said restoring the execution environment of the computer system comprises making the execution environment of the computer system substantially the same as when the particular snapshot was performed.

10           6.       The method of claim 1,  
              wherein said storing the information comprises persistently storing the information.

15           7.       The method of claim 1,  
              wherein said storing information comprises storing one or more of:  
              a variable value;  
              a property value.

20           8.       The method of claim 1,  
              wherein the test executive sequence comprises a plurality of steps;  
              wherein the points at which the snapshots are performed correspond to steps in the test executive sequence.

25           9.       The method of claim 1, further comprising:  
              receiving user input specifying criteria for when to perform the snapshots.

30           10.       The method of claim 1,  
              wherein the snapshots are performed periodically according to a particular time interval.

11. A memory medium for storing execution progress of a test executive sequence, the memory medium comprising program instructions executable to:

execute the test executive sequence on a computer system;

perform one or more snapshots of the execution of the test executive sequence,  
5 wherein each snapshot is performed at a particular point during execution of the test executive sequence;

wherein, for each snapshot, performing the snapshot comprises storing information usable to re-start execution of the test executive sequence from the point at which the snapshot was performed.

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12. The memory medium of claim 11, further comprising program instructions executable to:

stop execution of the test executive sequence after a particular snapshot is performed;

15 re-start execution of the test executive sequence from the point at which the particular snapshot was performed;

wherein said re-starting execution of the test executive sequence comprises using the stored information of the snapshot to restore an execution environment of the computer system so that the test executive sequence can execute correctly from the point  
20 at which the particular snapshot was performed.

13. The memory medium of claim 12,

wherein said restoring the execution environment of the computer system comprises using the stored information of the snapshot to re-create a stack frame of the  
25 computer system.

14. The memory medium of claim 11,

wherein said storing the information comprises persistently storing the information.

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15. The memory medium of claim 11,

wherein said storing information comprises storing one or more of:  
a variable value;  
a property value.

5           16.     The memory medium of claim 11,  
wherein the test executive sequence comprises a plurality of steps;  
wherein the points at which the snapshots are performed correspond to steps in  
the test executive sequence.

10           17.     The memory medium of claim 11,  
wherein the snapshots are performed periodically according to a particular  
time interval.

15           18.     A system for executing a test executive sequence, the system comprising:  
a processor;  
a first memory medium storing a test executive sequence;  
wherein the processor is operable to execute the test executive sequence;  
wherein the processor is operable to perform one or more snapshots of the  
20 execution of the test executive sequence, wherein each snapshot is performed at a  
particular point during execution of the test executive sequence;  
wherein, for each snapshot, performing the snapshot comprises storing  
information usable to re-start execution of the test executive sequence from the point at  
which the snapshot was performed.

25           19.     The system of claim 18, further comprising:  
a second memory medium providing a persistent storage means;  
wherein said storing information comprises persistently storing the information on  
the second memory medium.

20. A computer-implemented method for storing execution progress of a test executive sequence hierarchy, the method comprising:

executing the test executive sequence hierarchy on a computer system;

performing one or more snapshots of the execution of the test executive sequence hierarchy, wherein each snapshot is performed at a particular point during execution of the test executive sequence hierarchy;

wherein, for each snapshot, performing the snapshot comprises storing information usable to re-start execution of the test executive sequence hierarchy from the point at which the snapshot was performed.

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